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Clue in the Bee Death Mystery, Connection Between  
Nuclear Age and Climate Change

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## A Clue in the Bee Death Mystery

Domesticated honeybees get all the buzz, but wild bumble bees are in decline too, both globally and here in the United States. What gives? It's an important question, because while managed honeybees provide half of the pollination required by US crops, bumble and other wild bees deliver the other half.



Insecticides used in agriculture are one possible trigger—they exist to kill insects, after all, and bumble bees are insects. But a different kind of farm chemical, one designed to kill fungi that harm crops, has emerged as a possible culprit. A new [study](#) by a team of researchers led by Cornell University entomologist Scott McArt adds to the growing dossier of studies pinpointing fungicide as a potential bee killer (see [here](#), [here](#), and [here](#)). [Read more on Mother Jones.](#)



## A Poison in Our Island: Rising Seas and Nuclear Waste

In the late 1970s, Runit Island, on the remote Enewetak Atoll, was the scene of the largest nuclear clean-up in United States History.

Highly contaminated debris left over from dozens of atomic weapons tests was dumped into a 100-metre wide bomb crater on the tip of the uninhabited island.

US Army engineers sealed it up with a half-metre thick concrete cap almost the size of an Australian football ground, then left the island. Now with sea levels rising, water has begun to penetrate the dome.

A report commissioned by the US Department of Energy in 2013 found that radioactive materials were leaching out, threatening the already tenuous existence of Enewetak locals. "That dome is the connection between the nuclear age and the climate change age," says Marshall Islands climate change activist Alson Kelen. [Read more on ABC.](#)

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## **Sea Level Rise Will Imperil Humanity's Future and Its Past**

The modern human obsession with beachfront property is nothing new. For tens of thousands of years, our kind has been bonded to the coast and its bounty of food. Inland is alright, too, but nothing matches the productivity of the sea.



The problem with coastal living is that while the food supply is relatively stable, sea levels are not. They've always risen and fallen as the climate changes over the millennia—and thanks to the hyper-productivity of the Industrial Age, they're in the middle of a pretty significant uptick. In the coming decades, rising sea levels could jeopardize untold billions of dollars in real estate and infrastructure

along the world's coasts and displace millions of people.

While climate change imperils humanity's future, it also imperils its past. A [new study](#) out in PLOS One quantifies that in alarming detail: Just in the southeastern United States, a sea level rise of one meter would inundate thousands of archaeological sites, from Native American settlements to early European colonies. [Read more on Wired.](#)

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## A Map of \$1.1 Billion in Natural Gas Pipeline Leaks

When a crude oil pipeline is ruptured, it's bad news, particularly if the oil gets into water, where it's likely to impact wildlife or drinking water supplies. But when a natural

gas pipeline busts, it can be far worse because of the volatility of the fuel, which is made up mostly of methane. Leaked natural gas can't be recovered, it can build up in enclosed spaces and explode, and it is a potent greenhouse gas, with at least 30 times the warming potential of carbon dioxide over the long term.

Between January 2010 and November 2017, the nation's natural gas transportation network leaked a total of 17.55 billion cubic feet of mostly methane gas. That's enough to heat 233,000 homes for an entire year, and it's got the same global warming potential as the carbon dioxide emitted from a large coal-fired power plant over the course of a year. Pipeline incidents took nearly 100 lives, injured close to 500 people and forced the evacuation of

## **Arctic Drilling Efforts Hit Snag: 'This is What Happens When You Sneak Drilling into a Terrible Tax Bill'**

The [backdoor Arctic refuge drilling provision](#) snuck in the Senate Republican's tax reform plan could be held up thanks to a little-known procedural rule.

The Republican-led effort to open the pristine [Arctic National Wildlife Refuge](#) (ANWR) to oil and natural gas drilling could violate the Byrd Rule, which outlines what can be included in the Senate's budgetary legislation. According to the [Associated Press](#)

"Senate Democrats objected to the provision opening a portion of the remote refuge to oil drilling, saying measures to fast-track environmental approvals violate a rule designed to limit budget legislation to provisions that are mainly fiscal in nature. Congressional aides say the Senate parliamentarian has signaled agreement with Democrats, which could force Republicans to secure 60 votes for drilling, instead of 50 needed for the tax bill." [Read more on EcoWatch.](#)



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## **Atlantic Coast Pipeline Faces Another Delay as NC**

## Officials Push for More Details



The planned Atlantic Coast Pipeline, already more than a year behind schedule, could face further delays as North Carolina officials once again seek additional information on the project's potential impacts to the communities the pipeline will traverse.

The N.C. Department of Environmental Quality on Wednesday sent the pipeline's developers [a fourth round of questions](#) about the economic benefits and environmental risks of the project. The unusual repeat request gives pipeline officials 30 days to respond and gives the agency 60 days to review their response.

The energy consortium building the pipeline includes Charlotte-based Duke Energy and Dominion Energy in Richmond, Va. The proposed 600-mile pipeline would cross West Virginia, Virginia and North Carolina to bring natural gas from northern fracking operations to fuel Duke's power plants in North Carolina and South Carolina. [Read more on News & Observer.](#)

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## The North Carolina Natural Gas Compressor Station that Leaked? It Operates Without a Permit - Legally

State environmental officials launched the investigation after Ryan Emanuel, a former Robeson County native and member of the area's Lumbee tribe, complained. Emanuel is now an assistant professor specializing in hydrology and coastal science at NC State University.

Emanuel is an outspoken opponent of the proposed Atlantic Coast Pipeline, which will route through Robeson County.

The rules passed by the EMC last year allow certain facilities to apply to NC Department of Environmental Quality for an exemption from securing an air quality permit. Based on their emissions levels, more than 1,110 facilities qualified to apply for what is called a "rescission." Piedmont Natural Gas applied for, and received, an exemption for its compressor station in Prospect.

Facilities that emit less than five tons per year of each specified pollutant and less than 10 tons per year in total are exempt from permitting, as long as they meet all eligibility requirements. The facilities still must comply with air quality rules.

Facilities that are not exempt and that between 5 tons and 25 tons per year and meet other eligibility requirements in the rule are eligible for registration instead of obtaining a permit. The facilities also still must comply with air quality rules.

[Read more on NC Policy Watch](#)



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## Missouri DNR Causes a Stink After Shutting Down Attempt to Rein in Hog Odors



The Missouri Department of Natural Resources has blocked an attempt to rein in emissions from concentrated animal feeding operations in the state.

In September, Missouri residents submitted petitions to the state,

asking the Air Conservation Commission to issue new rules requiring owners of the feeding operations, known as CAFOs, to prepare odor control plans and limit hazardous emissions if the CAFO is within a mile of a school, residence or church.

Along with their petitions, the residents presented two affidavits from scientists attesting to the harmful health effects of emissions from the operations, which include hydrogen sulfide and ammonia.

Missouri's so-called "[Odor Rule](#)" for CAFOs only applies to the state's largest operations. The petitioners said planned CAFOs in Grundy, Callaway and Lewis counties would not trigger the rule because they would not house enough livestock. [Read more on St. Louis Post-Dispatch.](#)

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## DEQ Rules Propose Michigan Remove All Lead

## Service Lines in 20 Years

Proposed changes to the lead and copper rule in Michigan would lower the action level for lead in drinking water and require the removal of all lead service lines over the next 20 years.



The Michigan Department of Environmental Quality is holding a public information session discussing this and other changes from 5:30 to 8:30 p.m. tonight on Wednesday, Nov. 29, at the Lansing Center at 333 E. Michigan Ave. in Lansing.

"We're trying to be very transparent and open and kind of open the door to the general public at a phase where maybe they wouldn't have seen it before," said Eric Oswald, director of the DEQ's Drinking Water and Municipal Assistance Division.

The Flint water crisis emerged when the city switched water sources in 2014 and began using water from the Flint River. The more corrosive water, untreated, leached lead from the city's pipes and into its drinking water supply.

[Read more on MLive.](#)

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**Food, Culture, & Race are Part of New Exhibit at  
Philadelphia Museum of Art**



It's midday at the Philadelphia Museum of Art, and visitors are starting to trickle into the cafe for lunch. But there's not a pre-made sandwich, limp-leaf salad, or can of soda in sight.

Instead, the air is filled with the warming aroma of potlikker. The

cafe's glass wall looks out into a courtyard, where tiny hot peppers, stalks of sorghum, and heirloom squash grow in raised planters. At the counter, customers order squares of honey-soaked semolina cake and platters of stewed greens and jerk chicken.

This is the [Philadelphia Assembled Kitchen](#), where 12 culinary artists—home cooks, educators, entrepreneurs, organizers, and activists—are sharing their foodways and visions of survival, resistance, and victory. All this fall, the cafe and the building where it's located have been occupied by Philadelphia Assembled, [a sprawling, multi-year project](#) initiated by Dutch artist [Jeanne van Heeswijk](#). [Read more on Civil Eats](#).

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# In Case You Missed It: Debunking Climate Change Myths - A Holiday Conversation Guide

Despite the unmistakable evidence that climate change is happening and that the effects we're already experiencing are mostly caused by our own actions, it's not uncommon to meet deniers—even around your own family's holiday table.

Some of the misinformation that creeps into the doubters' discussions are the lingering leftovers of years of deliberate [peddling of misinformation](#), often by fossil fuel interests.

Some of it persists because, face it, not everybody is well versed in the scientific consensus, which is based on multiple streams of evidence from dozens of specialized disciplines. Who can keep up?

Even those who are thankful this year for the work of the United States Global Change Research Program, which just published [an update of the latest science](#), may not have studied all the details.

With that in mind, we asked you to share some of the common myths and errors you hear at family gatherings. And we've pieced together some short answers from that state-of-the-science report and other authoritative sources.

[Read more on InsideClimate News.](#)



organization envisioned by Rachel Carson to carry on her work after her death. We promote Carson's ecological ethic that combines scientific concern for the environment and human health with a sense of wonder and reverence for all forms of life in order to build a sustainable, just, and peaceful future.

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